
APPENDIX I

AIR ASSAULT OPERATIONS

When the SBCT infantry battalion executes an air assault operation, mechanized infantry companies form the primary air assault force. Usually, one or two companies form the basic air assault force, but a mechanized pure force may use all three companies. Higher headquarters provides the additional assets required to execute an air assault mission. In most cases, the operation concludes with a linkup operation between infantry and mounted forces.

Section I. AIR ASSAULT OPERATIONS

Situations favoring an air assault operation for the SBCT infantry battalion include those in which the enemy has a vulnerable area suitable for air assault, surprise can be achieved, and enemy air defenses are weak and vulnerable or can be effectively suppressed.

I-1. AIR ASSAULT MISSION ANALYSIS AND CONSIDERATIONS

The SBCT infantry battalion may not be frequently employed in air assault operations, but such operations, conducted on a limited scale, may be the decisive form of combat. Typical air assault operations conducted by the battalion include river-crossing operations, seizure of key terrain, rear area combat operations, and raids. When the SBCT is operating under TACON of a division, corps, or JTF, the controlling headquarters can exploit the mobility and speed of organic or supporting helicopters to--

- Secure a deep objective in the offense.
- Reinforce a threatened sector in the defense.
- Place combat power at a decisive point on the battlefield.

For this reason, the SBCT must be proficient in conducting air assault operations.

a. When the battalion is used in the air assault role, the disposition of the unit's vehicles is also a point of consideration. The combat vehicles of the battalion (-) can be--

- Attached for movement to an assaulting ground element (linkup force).
- Left in an assembly area until the assaulting element returns.
- Repositioned to provide supporting fires for adjacent units or the air assaulting force.

b. Other considerations include the following:

- Ground mobility is limited once the unit is inserted unless vehicles are provided.
- Communication range is limited to that of portable radios.
- Range of the reconnaissance platoon is limited unless its vehicles are moved into the objective area.
- Antiarmor capability is reduced.
- Combat support and combat service support are austere.

- Air lines of communication must be planned for sustainment.
 - Disposition of the 120-mm mortars depends on the ability to displace the tubes and ammunition. The M1100 trailer indigenous to light and special operation forces may meet this requirement.
- c. All other mission analysis factors are in FM 90-4 and are not unique to the SBCT infantry battalion.

I-2. AIR ASSAULT BATTALION ORGANIZATION

As with all air assault operations, the battalion is organized to meet METT-TC and operational considerations.

I-3. ACTIONS OF THE BATTALION (-)

The OPORD should reflect detailed planning for actions of the entire force, not only the air assault element but also the battalion (-) or battalion (-) stay behinds. This planning should emphasize command and control relationships, operational restrictions due to limited numbers of dismounted infantry, and linkup procedures. Should the battalion (-) or combat equipment of the battalion be tasked to perform linkup operations with their deployed infantry, operational issues of time, place, method of linkup, and change of command for operation and maneuver control of the combat vehicles must be carefully planned. Battalion (-) combat vehicles can be used for feints and deception operations prior to linkup with their deployed forces.

Section II. PLANNING CONSIDERATIONS

The battalion commander and staff should review the following planning considerations during the military decision-making process leading to an air assault operation.

I-4. INTELLIGENCE

The primary enemy tactics against air assault operations can be broken down into four major areas:

- Air defense fires (including small arms).
- Fixed- and rotary-wing aircraft.
- Electronic warfare.
- Enemy reaction to LZ operations.

The commander and staff must understand the capabilities and limitations of enemy aircraft in the AO and take all measures to minimize the risk of encounter. They must analyze enemy capabilities to interdict friendly LZs with ground forces, artillery, and CAS during the planning phase of the operation.

I-5. MANEUVER

Habitual relationships and the integration of infantry and Army aviation allow infantrymen and supporting fires to strike rapidly over extended distances. To provide surprise and shock effect, the required combat power should be delivered to the objective area as early as possible, consistent with aircraft and pickup zone capabilities. Attack helicopters, if available, are integrated into the tactical plan of the ground force commander. During air assault operations, they additionally support the lift and assault force by direct and indirect fires. Air assault forces operate relatively free of the terrain

influences that restrict surface operations. Air assault forces are best employed to locate and defeat enemy forces and installations or to seize terrain objectives to prevent enemy withdrawal, reinforcement, and supply, and to prevent the shifting and reinforcement of enemy reserves.

I-6. FIRE SUPPORT

FS planning must provide for suppressive fires along flight routes and in the vicinity of LZs. Priority of fires must be the suppression of enemy air defenses. Displacement of FS assets and resupply depends on helicopters as prime movers unless prime movers are lifted into the area. Suppression of suspected ADA sites along flight routes is vital to the success of an air assault operation. Naval gunfire (NGF) support and USAF CAS may be available to augment available artillery.

I-7. ENGINEER SUPPORT

Engineers in an air assault operation assist mobility by constructing or expanding helicopter LZs and FARPs and rehabilitating existing forward operational facilities. Engineers assist in breaching obstacles and fight as infantry when required.

I-8. AIR DEFENSE ARTILLERY

ADA assets provide protection against low-flying aircraft and attack helicopters. Early warning of enemy air is broadcast over the division early warning net. Avengers and Linebackers, if available, are used in support of the maneuver battalions and to protect C2 and static assets.

I-9. COMBAT SERVICE SUPPORT

Support of organic aviation units is extensive. FARPs are necessary to maintain the fast pace of air assault operations. The battalion's organic assets push supplies, material, fuel, and ammunition forward by helicopter to support the air assault operation.

I-10. COMMAND AND CONTROL

The key to successful air assault operations lies in precise, centralized planning and aggressive, decentralized execution. The availability of aviation assets is normally the major factor in determining task organization. Task organization must be determined and announced early in the planning process. Units must maintain tactical integrity throughout an air assault operation. Squads are normally loaded intact on the same helicopter to ensure unit integrity upon landing.

Section III. AIR ASSAULT PLANNING STAGES

The successful execution of an air assault depends on a careful mission analysis by the commander and staff and a detailed, precise reverse planning sequence. The five basic plans that constitute an air assault operation are the ground tactical plan, the landing plan, the air movement plan, the loading plan, and the staging plan (Figure I-1, page I-4). In operations involving units with organic combat vehicles, the ground tactical plan must also include a linkup plan. Air assaults are planned in reverse order, beginning with the ground tactical plan and working backwards to the staging plan.

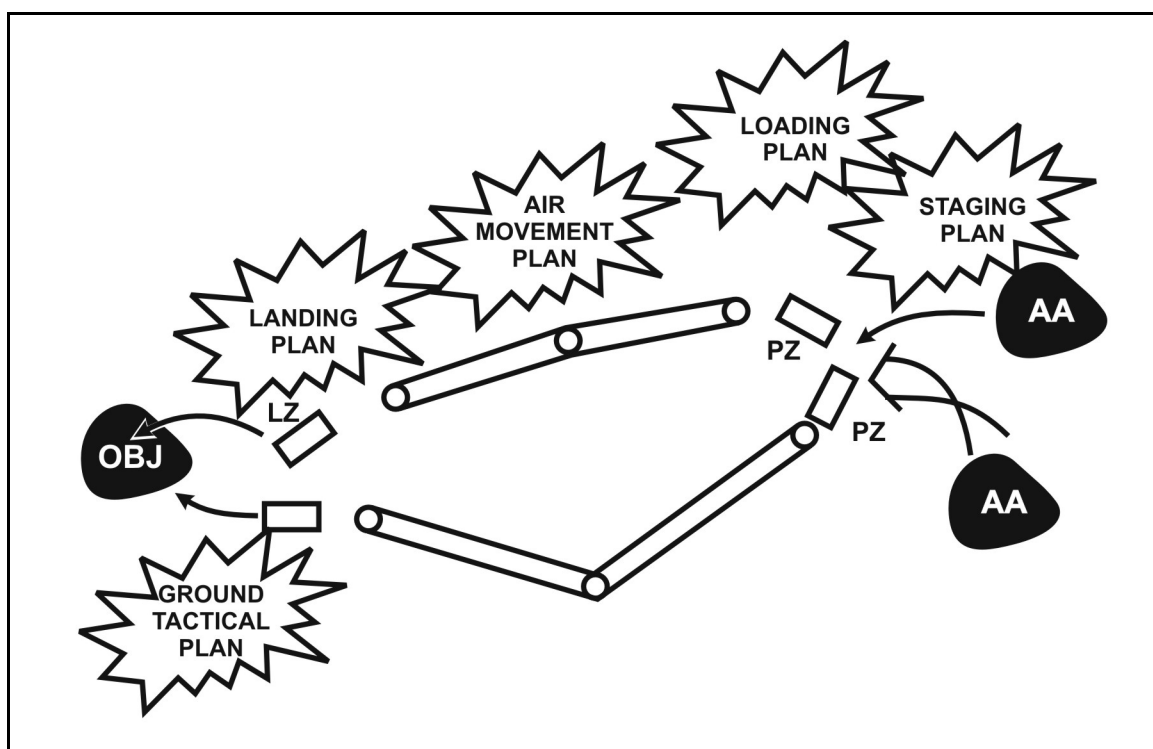


Figure I-1. Air assault planning process.

I-11. AIR ASSAULT BATTALION TASK FORCE KEY PERSONNEL

The battalion staff is responsible for planning the air assault operation and the accompanying battalion(-) operations, developing the air assault in conjunction with the

assault helicopter unit, synchronizing all elements of the combined arms team, and allocating the necessary resources to the air assault force to ensure successful execution of the operation.

a. **Air Assault Task Force Commander (AATFC).** The AATFC is normally the battalion commander. He has overall responsibility for the air assault task force's (AATF's) planning and execution. The SBCT commander may decide to assume this role.

b. **Air Mission Commander (AMC).** The supporting helicopter unit provides an AMC. For air assaults conducted by an aviation company from the general support aviation battalion, the battalion commander may designate a company commander or platoon leader to be the AMC.

c. **Aviation Liaison Officer.** The supporting aviation unit should provide an aviation liaison officer to the AATF. He should be considered a special staff officer. His role is to advise the AATFC on all matters relating to Army aviation and to jointly develop, along with the AATF staff, the detailed plans necessary to support the air assault operation. During the execution phase, he should be available to assist the AATFC or S3 in coordinating the employment of aviation assets.

I-12. AIR ASSAULT ROLES

Utility helicopters and cargo helicopters are the primary aircraft used in air assault operations.

a. **Utility Helicopters.** The primary mission of the utility helicopter in the air assault is to move troops. With the seats installed, the allowable cargo load (ACL) for the UH-60 is 11 combat-loaded soldiers. If the seats are removed, the ACL increases (the ACL then depends on the type of equipment being carried by the troops). For planning purposes, a UH-60 is capable of transporting approximately 16 combat-loaded troops.

b. **Cargo Helicopters.** The CH-47D helicopter provides the AATFC with the capability of moving troops and equipment in support of the air assault. In a troop-carrying mode, the CH-47D can transport up to 31 combat-loaded troops.

I-13. GROUND TACTICAL PLAN

The foundation of a successful air assault is the ground tactical plan. All other air assault planning stages are based on the ground tactical plan, which specifies actions in the objective area that will lead to accomplishment of the mission. The ground tactical plan addresses the following areas:

- Missions of all battalion elements and methods for employment.
- Zones of attack, sectors, or areas of operations with graphic control measures.
- Task organization to include command relationships.
- Location and size of reserves.
- Fire support to include graphic control measures.
- Combat service support.

NOTE: The AATF staff prepares this plan with input from all battalion elements and in sufficient detail to facilitate understanding by subordinate commanders. It is imperative that all aircrews know this ground tactical plan and the ground commander's intent.

a. **Commander's Intent.** The AATFC must articulate his intent for the air assault early in the planning process. Air assault planning often begins after the AATFC issues his intent even though the ground tactical plan may not be complete. The commander's intent for the air assault allows air assault planners to understand the method and end state and to begin to piece together the subsequent plans. The commander's intent for the air assault includes things such as whether the assault force will land on the objective or land near it and maneuver to it. The commander's intent for the air assault may include surprise as a critical element, which leads to the development of fire support and SEAD plans.

b. **Organization for Combat.** The mission, enemy situation, terrain, maneuver forces, and fire support assets all help air assault planners determine the battalion organization for combat. Planners emphasize--

- Maximizing combat power in the assault to heighten surprise and shock effect. This is especially important if the air assault force plans to land on or near the objective.
- Ensuring the battalion inserts enough force to accomplish initial objectives quickly. The air assault force must be massed in the LZ and build up significant combat power early to prevent being defeated by repositioning mobile enemy forces.
- Ensuring the air assault force has sufficient assets to sustain it until linkup.

c. **Scheme of Maneuver.** The AATFC develops a scheme of maneuver to accomplish his mission and seize assigned objectives. Scheme of maneuver development by the battalion headquarters allows subsequent planning phases of the air assault to be accomplished and must be done prior to development of the air assault. Development of the battalion ground tactical plan need not be complete to begin air assault mission planning. As a minimum, the AATFC must provide the ground scheme of maneuver for air assault planning to begin. Battalion planners should not wait for the completed assault force OPORD to begin planning. The battalion staff and aviation units can begin air assault planning as soon as the assault force commander approves the general scheme of maneuver.

d. **Fire Support.** The amount of artillery available to support the air assault and the locations of supporting artillery units are critical factors in determining the ground tactical plan.

e. **Attack Helicopters in Support of the Ground Tactical Plan.** During the ground fight, attack helicopters may assist the assault force commander by providing reconnaissance in the vicinity of the LZs, destroying repositioning forces, destroying counterattacking forces, and calling for and adjusting fire on targets of opportunity. A shift in C2 from the AMC to the assault force commander is critical and must be planned and rehearsed in detail. During an air assault with multiple lifts, the attack helicopters support the air assault and ground fight. (Some elements provide reconnaissance and security for the air assault; other elements screen for the assault force.) Synchronization of the attack assets must be precise and detailed to eliminate confusion and to avoid disrupting the air assault flow.

I-14. LANDING PLAN

The scheme of maneuver and ground tactical plan directly affect the selection of LZs, the landing formation, and the amount of combat power air assaulted into the LZ. The landing plan must be planned in conjunction with the development of the ground tactical plan and must support the assault force commander's intent and scheme of maneuver. The landing plan outlines the distribution, timing, and sequencing of aircraft into the LZ.

a. **LZ Selection.** In coordination with the AMC and LNO, the AATFC selects primary and alternate LZs. The number of selected LZs is based on the ground scheme of maneuver and LZ availability. The aviation planners advise the AATFC on LZ suitability. The considerations for selecting suitable landing zones are--

(1) **Location.** The LZ must be in an area supporting the ground tactical plan of the AATFC. It may be located on the objective, close by, or at a distance.

(2) **Capacity.** The selected LZ must be big enough to support the number of aircraft the AATFC requires on air assault lifts.

(3) **Enemy Disposition and Capabilities.** The AMC must consider enemy air defense locations and weapons ranges and the ability of the enemy to reposition ground forces to react to the air assault.

(4) **Unit Tactical Integrity.** Squads land in the LZ intact, and platoons land in the same serial. This ensures fighting unit integrity during the air assault.

(5) **Supporting Fires.** LZs selected must be in range of supporting fires (artillery, CAS, and naval gunfire).

(6) **Obstacles.** LZ selection includes existing obstacles on the LZ as well as plans for reinforcing them. LZs should be selected beyond enemy obstacles.

(7) **Identification from the Air.** The LZ should be identifiable from the air, if possible.

b. **Air Cavalry and Attack Helicopters in Support of the Landing Plan.** During execution of the landing plan, the air cavalry and attack helicopters can provide overwatch of the LZs, conduct a reconnaissance of the egress flight routes, call for fire (if designated to do so), and set up a screen for supporting the assault force commander during the ground tactical plan. The AMC must ensure that the missions of the attack and cavalry aircraft are synchronized with the assault helicopters.

I-15. AIR MOVEMENT PLAN

The air movement plan is based on the ground tactical and landing plans. It specifies the schedule and provides instructions for the movement of troops, equipment, and supplies from the PZ to the LZ. It provides coordinating instructions regarding air routes, ACPs, aircraft speeds, altitudes, formations, and fire support. The AATFC develops the air movement plan in conjunction with the AMC and flight lead. The air movement plan results in the production of the air movement table.

a. Selection of flight routes is always based on the factors of METT-TC. The battalion staff and the AMC consider the location of friendly troops, enemy disposition, air defense systems, terrain, and the locations of the PZ and LZ to select the best flight route. Selected flight routes should always be laid over the enemy situational template produced by the S2 to ensure that the flight route selected avoids known or suspected enemy positions.

b. The battalion staff and the AMC select primary and alternate flight routes. Alternate flight routes provide the assault force a preplanned, precoordinated method of moving from the PZ to LZ if the primary route becomes compromised.

c. Flight routes that pass through adjacent unit sectors must be coordinated and approved by the adjacent unit to avoid potential fratricide.

d. When selecting flight routes, the AMC and battalion staff must consider--

- Airspace management.
- Support of the landing plan.
- Enemy capabilities.
- Fire support.
- Flight route distance.

e. Air cavalry and attack helicopters can be used in support of the air movement plan. During the air movement phase, the air assault security forces provide reconnaissance and security for the assault helicopters.

I-16. LOADING PLAN

The AATFC bases the loading plan on the air movement and ground tactical plans. The loading plan ensures troops, equipment, and supplies are loaded on the correct aircraft. It establishes the priority of loads, the bump plan, and the cross loading of equipment and personnel. Detailed load planning ensures the battalion arrives at the LZ configured to support the ground tactical plan. A bump plan that ensures essential troops and equipment are loaded ahead of less critical loads in case aircraft are lost during the air assault. Planning for the loading plan must include the organization and operation of the PZ, the loading of aircraft, and the bump plan.

a. **Pickup Zone Selection.** The first step in the loading plan is selection of suitable primary and alternate PZs. Selection of PZs is based on--

- METT-TC.
- Commander's intent.
- Location of assault forces in relation to PZs.
- Size and capabilities of available PZs.
- Number of PZs.
- Proximity to troops.
- Accessibility.
- Vulnerability to attack.
- Surface conditions.

b. **Pickup Zone Control.** Once the AATFC selects the PZ, the PZ control officer (PZCO) organizes, controls, and coordinates PZ operation.

c. **Aviation Involvement.** The assault helicopter unit must ensure aviation expertise is present on the PZ.

d. **Pickup Zone Communications.** Communications must use the most secure means available. PZ operations may be conducted under radio listening silence to avoid electronic detection. This requires detailed planning. If under radio listening silence, it is imperative that aircrews remain on schedule to allow the PZCO to keep a smooth flow of troops from the PZ. PZ communications are accomplished on the established FM PZ control net, with transmissions kept to a minimum.

e. **Pickup Zone Marking.** The PZCO directs the marking of the PZ so the PZ is identifiable from the air. Far and near recognition signals are needed, especially at night, to allow pilots to orient on the PZ quickly. Touchdown points must be clearly marked. The PZCO must ensure no other lighting is on the PZ.

f. **Disposition of Loads on the Pickup Zone.** Personnel and equipment must be positioned on the PZ to conform with the landing formation. Flight crews must understand the loading plan on the PZ and be prepared to accept troops and equipment immediately upon landing. PZ sketches depicting locations of loads in the PZ assist flight crews in loading troops and equipment quickly once the aircraft arrive in the PZ. Flight crews should be provided a PZ diagram.

g. **Air Cavalry and Attack Helicopters in Support of the Loading Plan.** During the loading phase, the attack and cavalry helicopters assist by providing overwatch of the PZs and conducting a route reconnaissance of the air assault flight routes.

I-17. STAGING PLAN

The staging plan is based on the loading plan and prescribes the proper order for movement of personnel and aircraft to the PZ. Loads must be ready before the aircraft arrive at the PZ. During mission planning, the PZCO determines the time required to set up the PZ and selects times the PZ will be established (based upon the air assault H-hour).

a. **Mission Planning.** Mission planning includes coordination between the battalion and the AMC, development of the aviation OPORD, issuance of the OPORD, and rehearsals.

b. **Routes to the Pickup Zone.** The AMC must select flight routes to the PZ that allow the aircraft to arrive at the PZ on time and in the proper landing direction and configuration to accept loads.